DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013350 Address: 333 Burma Road **Date Inspected:** 29-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhou Cheng/Chen Xi/Sun Bo **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No Yes N/A N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

Segment 9AE

This QA Inspector performed a preliminary random visual inspection after the grit blast of the external components of the deck panel, side panel, and bottom panel and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Bay#19

During random in process inspection of Bike Path, BK6A, this QA inspector observed following issue. ZPMC personal performed carbon arc gouging of the parts of BK006A-002. According to fit up procedure ZPMC personal remove the weld of the closure plate and interior diaphragm plates and longitudinal stiffeners from bike path. After removing the parts ZPMC personal performed grinding to make smooth surface. ZPMC personal will performed MT for surface cracks detection because of cutting the welds. The removed parts are identified as: For further information, please see the attached pictures below.

Bav#8

During random in process inspection of Bike Path, BK4A, this QA inspector observed the transverse cracks in tack welds. The weld is fillet weld joining stringer plate to X7F stiffener. The tack welds were made by FCAW welding process. ZPMC personal removed all the cracked tack welds and re welded by SMAW welding process. The weld

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s having cracked tack welds were identified as:

BK004A6-059-068, 069- BKX8A stringer plate to X7F stiffener

BK004A6-058-112, 113- BKX9A stringer plate to X7F stiffener

BK004A6-055-068, 069- BKX8A stringer plate to X7F stiffener

BK004A6-056-068, 069- BKX8A stringer plate to X7F stiffener

For further information, please see the attached pictures below.

Bay#8

During random in process inspection of bike path BK004A6-060-068, 069, this QA inspector observed that the stringer plate BKX8A had been tack welded with X7F stiffener and was not properly supported. ZPMC personal has to use proper support to prevent tack weld cracking. This QA inspector observed all the tack welds were cracked from the members joining BKX8A to X7F as a lack of proper support. ZPMC personal has to remove all the crack tack welds and perform MT inspection before welding the new tack welds.

For further information, please see the attached pictures below.

Bay#8

SAW welding of weld joint BK004A1-054-009 located on BK004A-54. Welder is identified as 251393(1G). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

Bay#2

SAW welding of weld joint FB3216-001-001, 002 located on FB3216-001. Welder is identified as 045270 (1G). ZPMC QC is identified as Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint FB3175-001-080, 079, 077 and 078 located on FB3175-001. Welder is identified as 045270 (1G). ZPMC QC is identified as Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

FCAW welding of weld joint FB3216-001-001, 002 located on FB3216-001. Welder is identified as 062708 (1G). ZPMC QC is identified as Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-B-U2a-F-1.

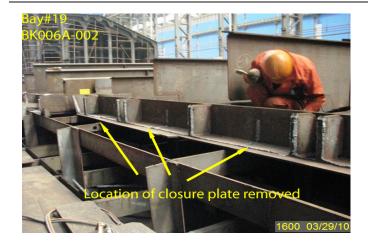
FCAW welding of weld joint FB3175-001-080, 079, 077 and 078 located on FB3175-001. Welder is identified as 062708 (1G). ZPMC QC is identified as Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-B-U2a-F-1.

FCAW welding of weld joint FB3226-001-001, 002 located on FB3226-001. Welder is identified as 062708 (1G). ZPMC QC is identified as Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-B-U2a-F-1.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel, Hiranch	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer